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EXAMINER
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QIN, JIANCHUN

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PAPER

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**GROUP 2800**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/642,542  
Filing Date: April 15, 2002  
Appellant(s): ISHII, JUN et al.

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John D. Gugliotta  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 05/07/2007 appealing from the Office action mailed 05/05/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

This appeal involves claims 1, 4, 11, 12, and 15.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

1) U.S. Pub. No. 2003/0103076      Neuman      6-2003

- |                            |                 |        |
|----------------------------|-----------------|--------|
| 2) U.S. Pat. No. 4,594,930 | Murakami        | 6-1986 |
| 3) U.S. Pat. No. 6,750,389 | Hagiwara et al. | 6-2004 |

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neuman (U.S. Pub. No. 2003/0103076) in view of Murakami (U.S. Pat. No. 4,594,930).

Regarding claim 1, Neuman teaches a recorder for recording a performance represented by pieces of first sort of music data in ensemble with a playback of a music passage represented by pieces of second sort of music data different in format from said first sort of music data (see Abstract), comprising: an interface connected to a data source of said pieces of said first sort of music data, another data source of said pieces of said second sort of music data and a destination to which a music data file is supplied (sections 0048, 0032, 0033 and 0039); and a data processing unit connected to said interface, extracting pieces of reference characteristic data representative of particular features of an audio signal expressing said music passage from said pieces of said

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second sort of music data, and forming said pieces of said first sort of music data, said pieces of reference characteristic data and pieces of time data representative of timing to reproduce tones produced in said performance into said music data file for supplying said music data file through said interface to said destination (Abstract; sections 0030, 0031 and 0049).

Neuman does not mention expressly: said pieces of reference characteristic data representative of particular features of an audio waveform expressing said music passage.

Murakami teaches a method of waveform analysis used for synchronizing playback of music files, including: a data processing unit that extracts and stores pieces of reference characteristic data representative of particular features of an audio waveform expressing a master music source, wherein said pieces of reference characteristic data are used for synchronization between selected music sources (col. 2, lines 19-57; cols. 2-3, lines 64-5; col. 5, lines 32-46 and cols. 7-8, lines 24-11).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Murakami in the invention of Neuman et al. in order to provide a data processing unit for accurately synchronizing playback of music files stored in the form of waveforms (Murakami, col. 1, lines 26-60).

Regarding claim 4, Neuman further teaches: the format for said piece of said first sort of music data is defined in MIDI, and the format for said pieces of said second sort of music data is defined in Red Book for compact discs (section 0048).

Regarding claim 11, Neuman further teaches: said data processing unit extracts abrupt changes of an attribute of sound from said pieces of said second sort of music data as said pieces of said reference characteristic data, and said abrupt changes are stored in said music data file together with other pieces of said time data representative of timing at which said abrupt changes take place (sections 0030 and 0031).

Regarding claim 12, Neuman further teaches: said abrupt changes are extracted from the entire music passage so that said another music passage is made consistent with said music passage by making said abrupt changes correspond to abrupt changes extracted from pieces of said second sort of music data representative of said another music passage (section 0031).

3. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neuman in view of Murakami, as applied to claim 1 above, and further in view of Hagiwara et al. (U.S. Pat. No. 6,750,389).

Regarding claim 15, Neuman in view of Murakami teach the recorder that includes the subject matter discussed above except: an automatic player piano serves as said data source so that said pieces of said first sort of music data are supplied to said interface while a user is fingering on said automatic player piano, and a compact disc loaded into a compact disc driver serves as said another data source so that said piece of said second sort of data are transferred from said compact disc to said interface while said user is fingering on said automatic player piano.

Hagiwara et al. disclose a musical performance control and tone generation apparatus, and teach: an automatic player piano (Fig. 2) serves as said data source

(col. 5, lines 41-67) so that pieces of first sort of music data (201-203) are supplied while a user is fingering on said automatic player piano (col. 7, lines 8-20), and a compact disc (401) loaded into a compact disc driver serves as another data source (301-303) so that said piece of said second sort of data are transferred from said compact disc to said interface while said user is fingering on said automatic player piano (cols. 5-6, lines 41-16 and col. 7, lines 8-20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Hagiwara et al. in the combination of Neuman et al. and Murakami in order to dynamically reproduce synchronized piano tones for an ensemble between an automatic player piano and a playback of a music passage (Hagiwara et al., col. 2, lines 43-52).

#### **(10) Response to Argument**

The appellant argued that "[t]here is no disclosure in Neuman of a recorder having a data processing unit that stores three categories of data into a file to ensure a synchronous playback, i.e., 'a data processing unit ... forming said pieces of said first sort of music data, said pieces of reference characteristic data and pieces of time data representative of timing to reproduce tones produced in said performance into said music data file' as recited in claim 1". The argument is not persuasive. The examiner's position is that Neuman does teach a data processing unit connected to an interface that takes first and second input media signals and generates an output signal (see Abstract and Fig. 3). The processing unit of Neuman produces a "derivative file" which

stores characteristic data representative of particular features of the second input signal and time data representative of timing to reproduce tones (see ¶ 0030), and forms first media signal, the characteristic data and the time data into said output signal for supplying music data file through said interface to a destination (see Abstract and ¶ 0031). The teaching of Neuman therefore reads on the claimed subject matter of the instant application, given the claims their broadest reasonable interpretation.

The appellant further argued that "[t]he recorder of the present invention stores music data of a first type from a first source (e.g., MIDI data from a musical performance), reference characteristic data extracted from music data of a second type from a second source (e.g., audio data from a CD) and time data to ensure synchronous playback if the music data of the first type from the first source is played back with music data of the second type from a source different than the initial second source (e.g., audio data from a different version of the same CD). In contrast, Neuman is not at all concerned with synchronously playing back an input signal with another input signal that varies from source to source". The argument is not persuasive either. Appellant's reliance upon the specification in this regard is noted. However, the feature in the specification to which appellant refers are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to appellant's argument about the Murakami patent, the examiner considers that Neuman teaches the subject matter discussed above but not clear about



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the details of said characteristic data. The combination of Neuman with Murakami's teaching of reference characteristic data representative of particular features of an audio waveform expressing a music passage reads on the claims. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Murakami in the invention of Neuman et al. in order to provide a data processing unit for accurately synchronizing playback of music files stored in the form of waveforms (Murakami, col. 1, lines 26-60). The combination of the references is therefore proper. The rejection stands.

The rest of the appellant's arguments regarding the dependent claims are reliant upon the issue discussed above, and are deemed to be non-persuasive as well for the reasons provided above for independent claim 1.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

**Respectfully submitted,**

Jianchun Qin



**Conferees:**

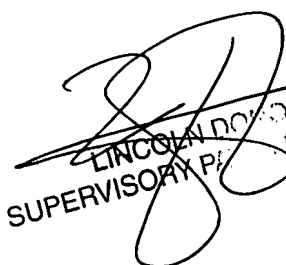
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